

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method for manufacturing an optical fiber preform using MCVD (Modified Chemical Vapor Deposition), comprising:

a deposition process for depositing soot particles on an inner wall of a hollow tube; and
a dehydration process for eliminating hydroxyl groups from the inner wall of the tube by supplying dehydration gas into the tube on which the soot particles have been deposited,

wherein the dehydration gas supplied in the dehydration process is directly preheated at a temperature of 600 to 1200°C before the hydration gas is supplied to the tube so that a temperature in the tube is kept above 500°C.

2. (Original) A method for manufacturing an optical fiber preform using MCVD according to claim 1,

wherein the dehydration gas is preheated at a position near a front end of the tube where the dehydration gas is introduced into the tube.

3. (Original) A method for manufacturing an optical fiber preform using MCVD according to claim 1,

wherein the dehydration gas is preheated at a position on a gas supply line before the dehydration gas is supplied to the tube.

4. (Original) A method for manufacturing an optical fiber preform using MCVD according to claim 1,

wherein the dehydration gas is preheated at a position in a pillow of a lathe to which the tube is rotatably installed and in which a gas path of the dehydration gas supplied from an external gas supply line to the tube is formed.

5. (Currently Amended) A method for manufacturing an optical fiber preform using MCVD according to claim 1,

wherein the dehydration gas is preheated with the use of a preheater ~~capable of~~ controlling whose thermal capacity is controllable.

6. (Original) A method for manufacturing an optical fiber preform using MCVD according to claim 5,

wherein a heatproof plate is installed near the preheater so as to protect environmental instruments from heat of the preheater.

7. (Currently Amended) A method for manufacturing an optical fiber preform using MCVD, comprising the step of:

heating a tube with the use of a torch which moves along the tube ~~with~~ while introducing a predetermined gas into the tube rotatably installed between a main pillow and an end pillow of a lathe,

wherein the predetermined gas supplied into the tube is directly preheated at a temperature identical to or lower than a heating temperature of the moving torch before the predetermined gas is supplied to the tube, and the heating step is any one of a deposition process and a sintering process.

8. (Original) A method for manufacturing an optical fiber preform using MCVD according to claim 7,

wherein the heating step is a deposition process for depositing soot particles on an inner wall of the tube by introducing reaction gas into the tube, wherein the reaction gas is preheated before being introduced into the tube so as to keep a temperature in the tube over 500°C.

9. (Original) A method for manufacturing an optical fiber preform using MCVD according to claim 7,

wherein the heating step is a sintering process for sintering soot particles deposited on an inner wall of the tube,

wherein preheated dehydration gas is supplied into the tube so as to keep a temperature in the tube over 500°C.

10. (Original) A method for manufacturing an optical fiber preform using MCVD according to claim 7,

wherein the gas supplied into the tube is preheated at a position near a front end of the tube where the gas is introduced into the tube.

11. (Currently Amended) A method for manufacturing an optical fiber preform using MCVD according to claim 10,

wherein the gas is preheated with the use of a preheater ~~capable of controlling~~ whose thermal capacity is controllable.

12. (Original) A method for manufacturing an optical fiber preform using MCVD according to claim 11,

wherein a heatproof plate is installed near the preheater so as to protect environmental instruments from heat of the preheater.

13. (Original) A method for manufacturing an optical fiber preform using MCVD according to claim 7,

wherein the gas supplied into the tube is preheated at a position on a gas supply line for supplying the gas into the tube.

14. (Currently Amended) A method for manufacturing an optical fiber preform using MCVD according to claim 13,

wherein the gas is preheated with the use of a preheater, and thermal capacity of the preheater is controllable ~~capable of controlling thermal capacity~~.

15. (Original) A method for manufacturing an optical fiber preform using MCVD according to claim 14,

wherein a heatproof plate is installed near the preheater so as to protect environmental instruments from heat of the preheater.

16. (Original) A method for manufacturing an optical fiber preform using MCVD according to claim 7,

wherein the gas supplied into the tube is preheated at a predetermined position in the main pillow of the lathe to which the tube is rotatably installed and in which a gas path of the gas supplied from an external gas supply line to the tube is formed.

17. (Currently Amended) A method for manufacturing an optical fiber preform using MCVD according to claim 16,

wherein the gas supplied into the tube is preheated with the use of a preheater, and a thermal capacity of the preheater is controllable ~~capable of controlling thermal capacity.~~

18-25. (Withdrawn)